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IS 6643 (1987): wooden pins for bivouac tents [CED 9 :
Timber and Timber Stores]

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“Knowledge is such a treasure which cannot be stolen”



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"**पुनर्दृष्टि गृहीत**"
"RE-AFFIRMED 1996"

IS : 6643 -1987

Indian Standard

SPECIFICATION FOR WOODEN PINS FOR BIVOUAC TENTS

(*First Revision*)

UDC 685.531.055 [674.7]

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

Indian Standard
SPECIFICATION FOR
WOODEN PINS FOR BIVOUAC TENTS
(First Revision)

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*Indian Standard*SPECIFICATION FOR
WOODEN PINS FOR BIVOUAC TENTS*(First Revision)*

0. F O R E W O R D

0.1 This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards on 29 June 1987 after the draft finalized by the Timber Stores Sectional Committee had been approved by the Civil Engineering Division Council.

0.2 This standard was first published in 1972 at the instance of the Directorate of Standardization, Ministry of Defence, as these pins are used in large quantities by the Defence Services. Wooden pins for bivouac tents are used in conjunction with poles for the erection of bivouac by troops, excursion parties and hikers.

0.2.1 The revision of this standard has been taken up to incorporate further changes necessary in the light of the developments in the industry. The modification includes the change in the requirements of material and workmanship, and sampling clause has now been included. The botanical names given in Appendix A have been brought in line with other published standards.

0.3 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard covers the requirements of wooden pins for use with bivouac tents.

*Rules for rounding off numerical values (revised).

2. TERMINOLOGY

2.1 For the purpose of this standard, the definitions given in IS : 707-1976* shall apply.

3. MATERIAL

3.1 The pins shall be manufactured from any of the species of timber given in Appendix A.

3.2 The timber shall be seasoned to a moisture contents not exceeding 20 percent and the inclination of grain shall not exceed 1 in 20. It shall be free from sapwood, centre heart (pith), any kind of decay (rot), insect attack, knots, wrap, checks, cracks and splits except hair splits.

4. MANUFACTURE

4.1 The pins shall be manufactured to the shape and design as shown in Fig. 1.

4.2 A hole of 3 mm diameter shall be drilled in the middle of the pins, as shown in Fig. 1, to facilitate easy handling.

5. DIMENSIONS AND TOLERANCES

5.1 Dimensions — The pins shall conform to their respective dimensions as shown in Fig. 1.

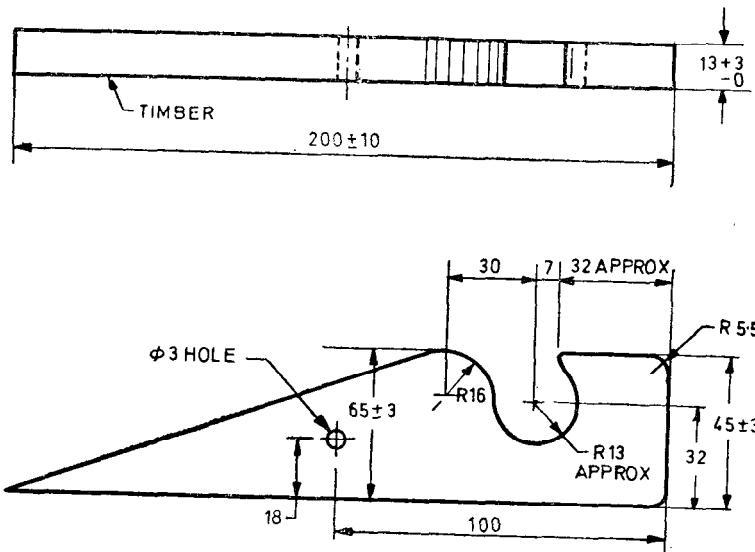


FIG. 1 WOODEN PIN FOR BIVOUAC TENT

5.2 Tolerances — The permissible tolerances are shown in Fig. 1. Where tolerances are not shown, normal manufacturing tolerances shall be permissible.

*Glossary of terms applicable to timber technology and utilization (second revision).

6. WORKMANSHIP AND FINISH

6.1 The pins shall be neatly made and shall be finished reasonably smooth all over.

6.2 The notch shall be accurately and clearly cut.

7. SAMPLING

7.1 The method of drawing representative samples of the pins and the criteria for conformity shall be as prescribed in Appendix B.

8. MARKING

8.1 Unless otherwise specified, each pin shall be legibly and indelibly marked with the manufacturer's name or recognized trade-mark and the year of manufacture.

8.1.1 The pins may also be marked with the Standard Mark.

NOTE — The use of the Standard Mark is governed by the provisions of the Bureau of Indian Standards Act, 1986 and the Rules and Regulations made thereunder. The Standard Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well defined system of inspection, testing and quality control which is devised and supervised by BIS and operated by the producer. Standard marked products are also continuously checked by BIS for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

A P P E N D I X A (Clause 3.1)

STANDARD TRADE NAME	ABBREVIATIONS	BOTANICAL NAME
Anjan	ANJ	<i>Hardwickia binata</i> , Roxb.
Axlewood (bakli)	AXL	<i>Anogeissus latifolia</i> , Bedd
Babul	BAB	<i>Acacia nilotica</i> , del.
Bijasal	BIJ	<i>Pterocarpus marsupium</i> , Roxb.
Dhaman	DHA	<i>Grewia tiliifolia</i> , Vahl.
Hopea	HOP	<i>Hopea</i> spp.
Indian oak	IOA	<i>Quercus</i> spp.
Khardhai	KAH	<i>Anogeissus pendula</i> , Edgew.
Laurel	LAU	<i>Terminalia alata</i> , Roth
Mahua	MAU	<i>Madhuca longifolia</i> , Mac.
Sal	SAL	<i>Bride</i>
Sandan	SAD	<i>Shorea robusta</i> , Gaertn f.
Sissoo	SIS	<i>Ougeinia oojeinensis</i> , Hochreut.
Sundri	SUN	<i>Dalbergia Sissoo</i> , Roxb.
Yon	YON	<i>Heritiera</i> spp.
		<i>Anogeissus acuminata</i> , Bedd.

APPENDIX B

(Clause 7.1)

SAMPLING AND CRITERIA FOR CONFORMITY

B-1. SCALE OF SAMPLING

B-1.1 Sampling of pins shall be done adopting any one and appropriate sampling method as given in IS : 4905 - 1968*, so that the samples drawn as in Table 1 for assessing various quality requirements are truly representative of the lot.

TABLE 1 SCALE OF SAMPLING AND PERMISSIBLE NUMBER OF DEFECTIVES

(Clauses B-1.1, B-1.3, B-2.2, B-3.1 and B-3.3)

NUMBER OF PINS IN THE LOT	NUMBER OF PINS TO BE DRAWN IN THE SAMPLE	PERMISSIBLE NUMBER OF DEFECTIVE PINS IN THE SAMPLE	NUMBER OF PINS IN THE SUB- SAMPLE	PERMISSIBLE NUMBER OF DEFECTIVE PINS IN THE SUB-SAMPLE
(1)	(2)	(3)	(4)	(5)
Up to 100	13	2	8	1
101 „ 150	20	3	8	1
151 „ 300	35	5	8	1
301 „ 500	50	7	8	1
501 „ 1 000	80	10	13	2
1 001 „ 3 000	125	14	13	2

B-1.2 Lot — In any consignment, if all the pins are homogeneous in respect of shape, type, size, colour, source and year of manufacture, the delivery shall be treated as one lot. If not, it shall be segregated by the firm/supplier into separate groups such that each group is homogeneous within itself from a lot.

B-1.3 The conformity of the pins in a consignment to the requirements of this specification shall be ascertained for each lot separately. The number of pins to be drawn in the sample shall be in accordance with col 1 and 2 of Table 1.

B-2. CRITERIA FOR CONFORMITY

B-2.1 All the pins selected according to B-1.1 and B-1.3 shall be inspected for shape, workmanship, finish and other visual defects.

B-2.2 The lot shall be considered as conforming to the requirements as given in B-2.1, if the number of defective pins is less than or equal to the number given in col 3 of Table 1, otherwise the lot shall be rejected.

*Methods of random sampling.

B-3. SELECTION OF SAMPLES FOR FURTHER TESTS

B-3.1 In case, the lot has been found satisfactory in **B-2.2**, a sub-sample of size given in col 4 of Table 1 shall be drawn at random from the sampled pins (col 2 of Table 1).

B-3.2 All the pins selected in **B-3.1** shall be tested for dimensions, moisture content and species of timber.

B-3.3 The lot shall be considered conforming to the requirements of the tests given in **B-3.2**, if the number of defective pins is less than or equal to the number given in col 5 of Table 1, otherwise the lot shall be rejected.

INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

Base Units

<i>Quantity</i>	<i>Unit</i>	<i>Symbol</i>
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous intensity	candela	cd
Amount of substance	mole	mol

Supplementary Units

<i>Quantity</i>	<i>Unit</i>	<i>Symbol</i>
Plane angle	radian	rad
Solid angle	steradian	sr

Derived Units

<i>Quantity</i>	<i>Unit</i>	<i>Symbol</i>	<i>Definition</i>
Force	newton	N	1 N = 1 kg·m/s ²
Energy	joule	J	1 J = 1 N·m
Power	watt	W	1 W = 1 J/s
Flux	weber	Wb	1 Wb = 1 V·s
Flux density	tesla	T	1 T = 1 Wb/m ²
Frequency	hertz	Hz	1 Hz = 1 c/s (s ⁻¹)
Electric conductance	siemens	S	1 S = 1 A/V
Electromotive force	volt	V	1 V = 1 W/A
Pressure, stress	pascal	Pa	1 Pa = 1 N/m ²

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